

March 29, 2017

Mr. Dennis Curran
FGS/CMT
136 Maine Ave
Bangor, ME 04401

RE: Katahdin Lab Number: SK2125
Project ID: Highlander Center
Project Manager: Ms. Kristen Schultz
Sample Receipt Date(s): March 17, 2017

Dear Mr. Curran:

Please find enclosed the following information:

- * Report of Analysis (Analytical and/or Field)
- * Quality Control Data Summary
- * Chain of Custody (COC)
- * Login Report

A copy of the Chain of Custody is included in the paginated report. The original COC is attached as an addendum to this report.

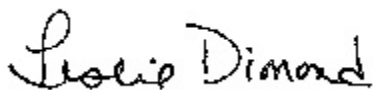
Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact the project manager listed above. The results contained in this report relate only to the submitted samples. This cover letter is an integral part of the ROA.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in an attached technical narrative or in the Report of Analysis.

We appreciate your continued use of our laboratory and look forward to working with you in the future. The following signature indicates technical review and acceptance of the data.

Please go to <http://www.katahdinlab.com/cert.html> for copies of Katahdin Analytical Services Inc. current certificates and analyte lists.

Sincerely,
KATAHDIN ANALYTICAL SERVICES



Authorized Signature

03/29/2017

Date

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

- U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.
- Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL, "U" LOQ or "U" LOD, where the rate of false negatives is <1%.
- * Compound recovery or percent RPD (relative percent difference) was outside of quality control limits.
- D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.
- E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.
- J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).
- or
- J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.
- B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
- C Indicates that the flagged compound did not meet DoD criteria in the corresponding daily calibration verification (CV).
- L Indicates that the flagged compound did not meet DoD criteria in the corresponding Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) prepared and/or analyzed concurrently with the sample.
- M Indicates that the flagged compound did not meet DoD criteria in the Matrix Spike and/or Matrix Spike Duplicate prepared and/or analyzed concurrently with the native sample.
- N Presumptive evidence of a compound based on a mass spectral library search.
- A Indicates that a tentatively identified compound is a suspected aldol-condensation product.
- P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

Report of Analytical Results

Client: FGS/CMT
Lab ID: SK2125-1
Client ID: IA#2-80 ELM
Project: Highlander Center
SDG: SK2125
Lab File ID: A4236.D

Sample Date: 15-MAR-17
Received Date: 17-MAR-17
Extract Date: 28-MAR-17
Extracted By: WAS
Extraction Method: TO 15
Lab Prep Batch: WG202184

Analysis Date: 28-MAR-17
Analyst: WAS
Analysis Method: EPA TO-15
Matrix: AR
% Solids: NA
Report Date: 29-MAR-17

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
Vinyl Chloride	U	0.038	ug/m3	1	.1	0.26	0.038
1,1-Dichloroethene	U	0.036	ug/m3	1	.1	0.40	0.036
trans-1,2-Dichloroethene	U	0.059	ug/m3	1	.1	0.40	0.059
1,1-Dichloroethane	U	0.044	ug/m3	1	.1	0.40	0.044
cis-1,2-Dichloroethene	U	0.059	ug/m3	1	.1	0.40	0.059
1,2-Dichloroethane	U	0.040	ug/m3	1	.1	0.40	0.040
1,1,1-Trichloroethane	U	0.044	ug/m3	1	.1	0.54	0.044
Trichloroethene	U	0.048	ug/m3	1	.1	0.54	0.048
Tetrachloroethene	J	0.45	ug/m3	1	.1	0.68	0.088

Report of Analytical Results

Client: FGS/CMT
Lab ID: SK2125-2
Client ID: IA#3-88 ELM BACK
Project: Highlander Center
SDG: SK2125
Lab File ID: A4237.D

Sample Date: 15-MAR-17
Received Date: 17-MAR-17
Extract Date: 28-MAR-17
Extracted By: WAS
Extraction Method: TO 15
Lab Prep Batch: WG202184

Analysis Date: 28-MAR-17
Analyst: WAS
Analysis Method: EPA TO-15
Matrix: AR
% Solids: NA
Report Date: 29-MAR-17

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
Vinyl Chloride	U	0.038	ug/m3	1	.1	0.26	0.038
1,1-Dichloroethene	U	0.036	ug/m3	1	.1	0.40	0.036
trans-1,2-Dichloroethene	U	0.059	ug/m3	1	.1	0.40	0.059
1,1-Dichloroethane	U	0.044	ug/m3	1	.1	0.40	0.044
cis-1,2-Dichloroethene	U	0.059	ug/m3	1	.1	0.40	0.059
1,2-Dichloroethane	U	0.040	ug/m3	1	.1	0.40	0.040
1,1,1-Trichloroethane	U	0.044	ug/m3	1	.1	0.54	0.044
Trichloroethene	U	0.048	ug/m3	1	.1	0.54	0.048
Tetrachloroethene	J	0.40	ug/m3	1	.1	0.68	0.088

Report of Analytical Results

Client: FGS/CMT
Lab ID: SK2125-3
Client ID: IA#4-88 FRONT
Project: Highlander Center
SDG: SK2125
Lab File ID: A4238.D

Sample Date: 15-MAR-17
Received Date: 17-MAR-17
Extract Date: 28-MAR-17
Extracted By: WAS
Extraction Method: TO 15
Lab Prep Batch: WG202184

Analysis Date: 28-MAR-17
Analyst: WAS
Analysis Method: EPA TO-15
Matrix: AR
% Solids: NA
Report Date: 29-MAR-17

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
Vinyl Chloride	U	0.038	ug/m3	1	.1	0.26	0.038
1,1-Dichloroethene	U	0.036	ug/m3	1	.1	0.40	0.036
trans-1,2-Dichloroethene	U	0.059	ug/m3	1	.1	0.40	0.059
1,1-Dichloroethane	U	0.044	ug/m3	1	.1	0.40	0.044
cis-1,2-Dichloroethene	U	0.059	ug/m3	1	.1	0.40	0.059
1,2-Dichloroethane	U	0.040	ug/m3	1	.1	0.40	0.040
1,1,1-Trichloroethane	U	0.044	ug/m3	1	.1	0.54	0.044
Trichloroethene	U	0.048	ug/m3	1	.1	0.54	0.048
Tetrachloroethene	J	0.19	ug/m3	1	.1	0.68	0.088

Report of Analytical Results

Client: FGS/CMT
Lab ID: SK2125-4
Client ID: IA#5-86 ELM C.S.
Project: Highlander Center
SDG: SK2125
Lab File ID: A4239.D

Sample Date: 15-MAR-17
Received Date: 17-MAR-17
Extract Date: 28-MAR-17
Extracted By: WAS
Extraction Method: TO 15
Lab Prep Batch: WG202184

Analysis Date: 28-MAR-17
Analyst: WAS
Analysis Method: EPA TO-15
Matrix: AR
% Solids: NA
Report Date: 29-MAR-17

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
Vinyl Chloride	U	0.038	ug/m3	1	.1	0.26	0.038
1,1-Dichloroethene	U	0.036	ug/m3	1	.1	0.40	0.036
trans-1,2-Dichloroethene	U	0.059	ug/m3	1	.1	0.40	0.059
1,1-Dichloroethane	U	0.044	ug/m3	1	.1	0.40	0.044
cis-1,2-Dichloroethene	U	0.059	ug/m3	1	.1	0.40	0.059
1,2-Dichloroethane	U	0.040	ug/m3	1	.1	0.40	0.040
1,1,1-Trichloroethane	U	0.044	ug/m3	1	.1	0.54	0.044
Trichloroethene	U	0.048	ug/m3	1	.1	0.54	0.048
Tetrachloroethene		1.0	ug/m3	1	.1	0.68	0.088

Report of Analytical Results

Client: FGS/CMT
Lab ID: SK2125-5
Client ID: IA#6-86 ELM
Project: Highlander Center
SDG: SK2125
Lab File ID: A4240.D

Sample Date: 15-MAR-17
Received Date: 17-MAR-17
Extract Date: 29-MAR-17
Extracted By: WAS
Extraction Method: TO 15
Lab Prep Batch: WG202184

Analysis Date: 29-MAR-17
Analyst: WAS
Analysis Method: EPA TO-15
Matrix: AR
% Solids: NA
Report Date: 29-MAR-17

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
Vinyl Chloride	U	0.038	ug/m3	1	.1	0.26	0.038
1,1-Dichloroethene	U	0.036	ug/m3	1	.1	0.40	0.036
trans-1,2-Dichloroethene	U	0.059	ug/m3	1	.1	0.40	0.059
1,1-Dichloroethane	U	0.044	ug/m3	1	.1	0.40	0.044
cis-1,2-Dichloroethene	U	0.059	ug/m3	1	.1	0.40	0.059
1,2-Dichloroethane	U	0.040	ug/m3	1	.1	0.40	0.040
1,1,1-Trichloroethane	U	0.044	ug/m3	1	.1	0.54	0.044
Trichloroethene	U	0.048	ug/m3	1	.1	0.54	0.048
Tetrachloroethene		1.9	ug/m3	1	.1	0.68	0.088

Form 4 Method Blank Summary - VOA

Lab Name : Katahdin Analytical Services
Project : Highlander Center
Lab File ID : A4233.D
Instrument ID : AIR1
Heated Purge : No

SDG : SK2125
Lab Sample ID : WG202184-2
Date Analyzed : 28-MAR-17
Time Analyzed : 14:29

This Method Blank applies to the following samples, LCS, MS and MSD:

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Laboratory Control S	WG202184-1	A4231.D	03/28/17	13:04
IA#2-80 ELM	SK2125-1	A4236.D	03/28/17	16:46
IA#3-88 ELM BACK	SK2125-2	A4237.D	03/28/17	17:32
IA#4-88 FRONT	SK2125-3	A4238.D	03/28/17	18:18
IA#5-86 ELM C.S.	SK2125-4	A4239.D	03/28/17	19:03
IA#6-86 ELM	SK2125-5	A4240.D	03/29/17	10:16

Report of Analytical Results

Client:
Lab ID: WG202184-2
Client ID: Method Blank Sample
Project:
SDG: SK2125
Lab File ID: A4233.D

Sample Date:
Received Date:
Extract Date: 28-MAR-17
Extracted By: WAS
Extraction Method: TO 15
Lab Prep Batch: WG202184

Analysis Date: 28-MAR-17
Analyst: WAS
Analysis Method: EPA TO-15
Matrix: AR
% Solids: NA
Report Date: 29-MAR-17

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
Vinyl Chloride	U	0.038	ug/m3	1	.1	0.26	0.038
1,1-Dichloroethene	U	0.036	ug/m3	1	.1	0.40	0.036
trans-1,2-Dichloroethene	U	0.059	ug/m3	1	.1	0.40	0.059
1,1-Dichloroethane	U	0.044	ug/m3	1	.1	0.40	0.044
cis-1,2-Dichloroethene	U	0.059	ug/m3	1	.1	0.40	0.059
1,2-Dichloroethane	U	0.040	ug/m3	1	.1	0.40	0.040
1,1,1-Trichloroethane	U	0.044	ug/m3	1	.1	0.54	0.044
Trichloroethene	U	0.048	ug/m3	1	.1	0.54	0.048
Tetrachloroethene	U	0.088	ug/m3	1	.1	0.68	0.088

LCS Recovery Report

Client:
Lab ID: WG202184-1
Client ID: LCS
Project:
SDG: SK2125
LCS File ID: A4231.D

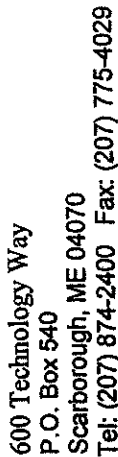
Sample Date:
Received Date:
Extract Date: 28-MAR-17
Extracted By: WAS
Extraction Method: TO 15
Lab Prep Batch: WG202184

Analysis Date: 28-MAR-17
Analyst: WAS
Analysis Method: EPA TO-15
Matrix: AR
% Solids: NA
Report Date: 29-MAR-17

Compound	Recovery (%)	Conc Added	Conc Recovered	Conc Units	Limits
Vinyl Chloride	90.0	5.00	4.50	ppb/v	70-130
1,1-Dichloroethene	82.0	5.00	4.10	ppb/v	70-130
trans-1,2-Dichloroethene	94.0	5.00	4.70	ppb/v	70-130
1,1-Dichloroethane	88.0	5.00	4.40	ppb/v	70-130
cis-1,2-Dichloroethene	100.	5.00	5.00	ppb/v	70-130
1,2-Dichloroethane	92.0	5.00	4.60	ppb/v	70-130
1,1,1-Trichloroethane	96.0	5.00	4.80	ppb/v	70-130
Trichloroethene	98.0	5.00	4.90	ppb/v	70-130
Tetrachloroethene	92.0	5.00	4.60	ppb/v	70-130

Client: <u>FGS/CMT</u>	KAS PM: <u>KSS</u>	Sampled By: <u>C bent</u>
Project:	KIMS Entry By: <u>GN</u>	Delivered By: <u>KAS</u>
KAS Work Order#: <u>SK2126/SK21275</u>	KIMS Review By:	Received By: <u>GN</u>
SDG #:	Cooler: <u>1</u> of <u>1</u>	Date/Time Rec.: <u>3-17-17/1430</u>

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		<input checked="" type="checkbox"/>			
2. Chain of Custody present in cooler?	<input checked="" type="checkbox"/>				
3. Chain of Custody signed by client?	<input checked="" type="checkbox"/>				
4. Chain of Custody matches samples?	<input checked="" type="checkbox"/>				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Temp (°C): <u>N/A</u>
Samples received at <6 °C w/o freezing?				<input checked="" type="checkbox"/>	Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?				<input checked="" type="checkbox"/>	The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?				<input checked="" type="checkbox"/>	
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				<input checked="" type="checkbox"/>	Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles:				<input checked="" type="checkbox"/>	
Aqueous: No bubble larger than a pea?				<input checked="" type="checkbox"/>	
Soil/Sediment:				<input checked="" type="checkbox"/>	
Received in airtight container?				<input checked="" type="checkbox"/>	
Received in methanol?				<input checked="" type="checkbox"/>	
Methanol covering soil?				<input checked="" type="checkbox"/>	
D.I. Water - Received within 48 hour HT?				<input checked="" type="checkbox"/>	
Air: Refer to KAS COC for canister/flow controller requirements.	<input checked="" type="checkbox"/> if air included				
7. Trip Blank present in cooler?				<input checked="" type="checkbox"/>	
8. Proper sample containers and volume?	<input checked="" type="checkbox"/>				
9. Samples within hold time upon receipt?	<input checked="" type="checkbox"/>				
10. Aqueous samples properly preserved?				<input checked="" type="checkbox"/>	
Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2				<input checked="" type="checkbox"/>	
Sulfide - >9				<input checked="" type="checkbox"/>	
Cyanide – pH >12				<input checked="" type="checkbox"/>	
* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.					



Air Analysis Chain of Custody

Client: F6S CRT int

Address: 136 MAINE AVE

Purchase Order #:

Billing Address (if different):

Sampler (Print/Sign): Dennis (vccan) Dennis

Copies To:

Lab Use Only

Work Order #: SK3125 KAS Project Manager:

Shipping:

SAR

Ex-Def

Mail

Drop-Off

917C-VB

Requested Services

Comments

Inoor Air - 24 hr - Individually Cert.

[illegible]

Katahdin inspects and verifies all equipment including, but not limited to, canisters and flow controllers before being sent to the client. As the client you have agreed to pay a rental fee for use of this equipment, which is the sole property of Katahdin. All equipment will be inspected for damage and completeness upon return to Katahdin. In the event that rental equipment is missing and/or damaged, by signing this COC, you (the client) agrees to pay Katahdin for replacement of any unuseable, damaged or missing equipment.

Login Number: SK2125

Account: FGS001

FGS/CMT

Project: FGSAIRCL

NoWeb

Quote/Incoming:

Login Information:

ANALYSIS INSTRUCTIONS : air job. ND to MDL for TO 15 - chlorinated compounds only

CHECK NO. :

CLIENT PO# :

CLIENT PROJECT MANAGE :

CONTRACT :

COOLER TEMPERATURE : n/a

DELIVERY SERVICES : KAS

EDD FORMAT : KAS064QC-XLS

LOGIN INITIALS : GN

PM : KSS

PROJECT NAME : Highlander Center

QC LEVEL : II+

REGULATORY LIST :

REPORT INSTRUCTIONS : email pdf and invoice to dennis, no HC, merge results for EDD, email invoice also to lcall@fgscmt.com

SDG ID :

SDG STATUS :

Primary Report Address:

Dennis Curran
FGS/CMT
136 Maine Ave

Bangor, ME 04401

dcurran@fgscmt.com

Primary Invoice Address:

Sharon Cormier
FGS/CMT
136 Maine Ave

Bangor, ME 04401

Report CC Addresses:

Invoice CC Addresses:

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SK2125-1	IA#2-80 ELM	15-MAR-17 09:58	17-MAR-17			29-MAR-17	
Matrix	Product	Hold Date (shortest)	Bottle Type		Bottle Count	Comments	
Air	S CANISTER_RENTAL						
Air	S TO-15-S	14-APR-17	Canister				
SK2125-2	IA#3-88 ELM BACK	15-MAR-17 10:22	17-MAR-17			29-MAR-17	
Matrix	Product	Hold Date (shortest)	Bottle Type		Bottle Count	Comments	
Air	S CANISTER_RENTAL						
Air	S TO-15-S	14-APR-17	Canister				
SK2125-3	IA#4-88 FRONT	15-MAR-17 10:34	17-MAR-17			29-MAR-17	
Matrix	Product	Hold Date (shortest)	Bottle Type		Bottle Count	Comments	
Air	S CANISTER_RENTAL						
Air	S TO-15-S	14-APR-17	Canister				
SK2125-4	IA#5-86 ELM C.S.	15-MAR-17 10:52	17-MAR-17			29-MAR-17	
Matrix	Product	Hold Date (shortest)	Bottle Type		Bottle Count	Comments	
Air	S CANISTER_RENTAL						
Air	S TO-15-S	14-APR-17	Canister				
SK2125-5	IA#6-86 ELM	15-MAR-17 11:05	17-MAR-17			29-MAR-17	
Matrix	Product	Hold Date (shortest)	Bottle Type		Bottle Count	Comments	
Air	S CANISTER_RENTAL						
Air	S TO-15-S	14-APR-17	Canister				

Total Samples: 5

Total Analyses: 10